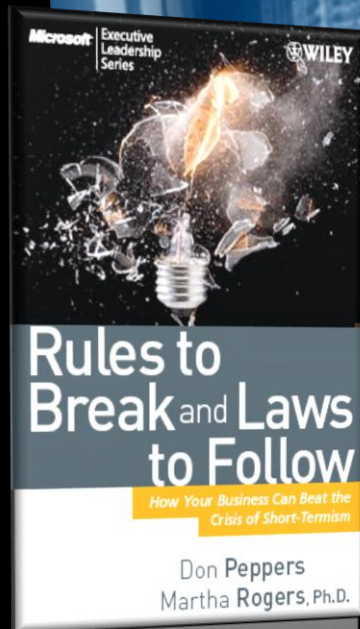


Merging with Our Machines

CIT Changes Human Reality Entirely

Don Peppers

28 January 2010
Quito



Peppers & Rogers Group
Peppers & Rogers Group

20 million+
Google searches
every hour, 24/7



Technology Changes Everything

Peppers & Rogers Group

New technical information now
doubles every two years. By 2015 it
will be doubling every 72 hours



Technology Changes Everything

Peppers & Rogers Group

80% of U.S. companies
use Linked In to recruit
employees



Technology Changes Everything

Peppers & Rogers Group

1 out of every 8 U.S.
couples married in 2008
met each other online



Technology Changes Everything

Peppers & Rogers Group

Last year, 37% of smartphone owners used their phones to buy merchandise

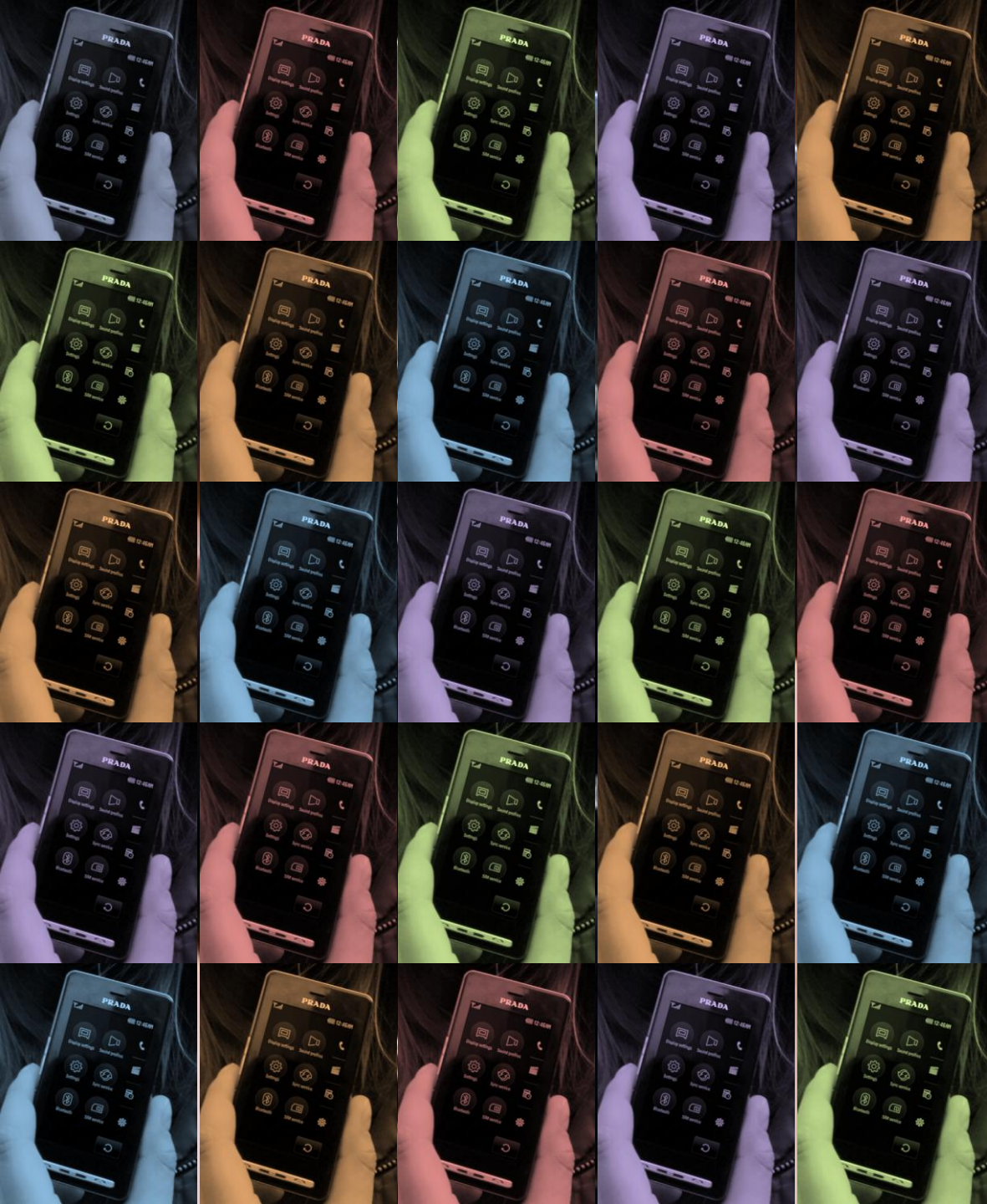


Technology Changes Everything

Peppers & Rogers Group

No matter how
innovative your
product is today...





...tomorrow it
will still be a
commodity.

And tomorrow
comes faster
now than it
used to



Technological Progress is Accelerating

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driving faster and faster economic growth



By 1960, growth increased again, to about 2.3% p.a.

By 1900, the rate of growth had climbed to 1.5% p.a.

Around 1700, steady economic growth started, at about 0.75% p.a.

For 100,000 years, the average human being lived on the equivalent of \$400 to \$600 p.a.

Malthus was wrong



Thomas Robert Malthus, Jr.

Population growth **accelerates**
progress, it doesn't inhibit progress

People are 30 times wealthier today,
per capita, than 200 years ago

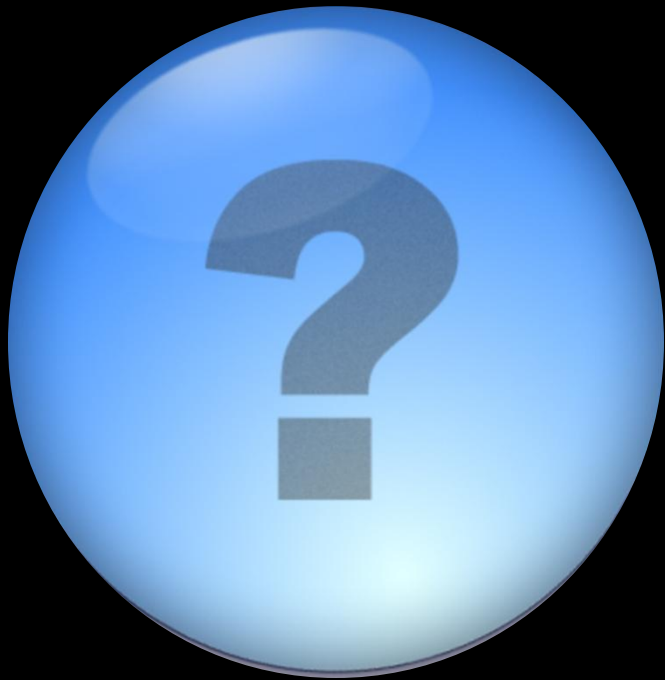
The more brains are available, the
more creativity is unleashed

The more innovations we have, the
faster we discover new ones

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Question:

Of the 100 entities in the world generating the most revenue, how many are nation-states, and how many are businesses?

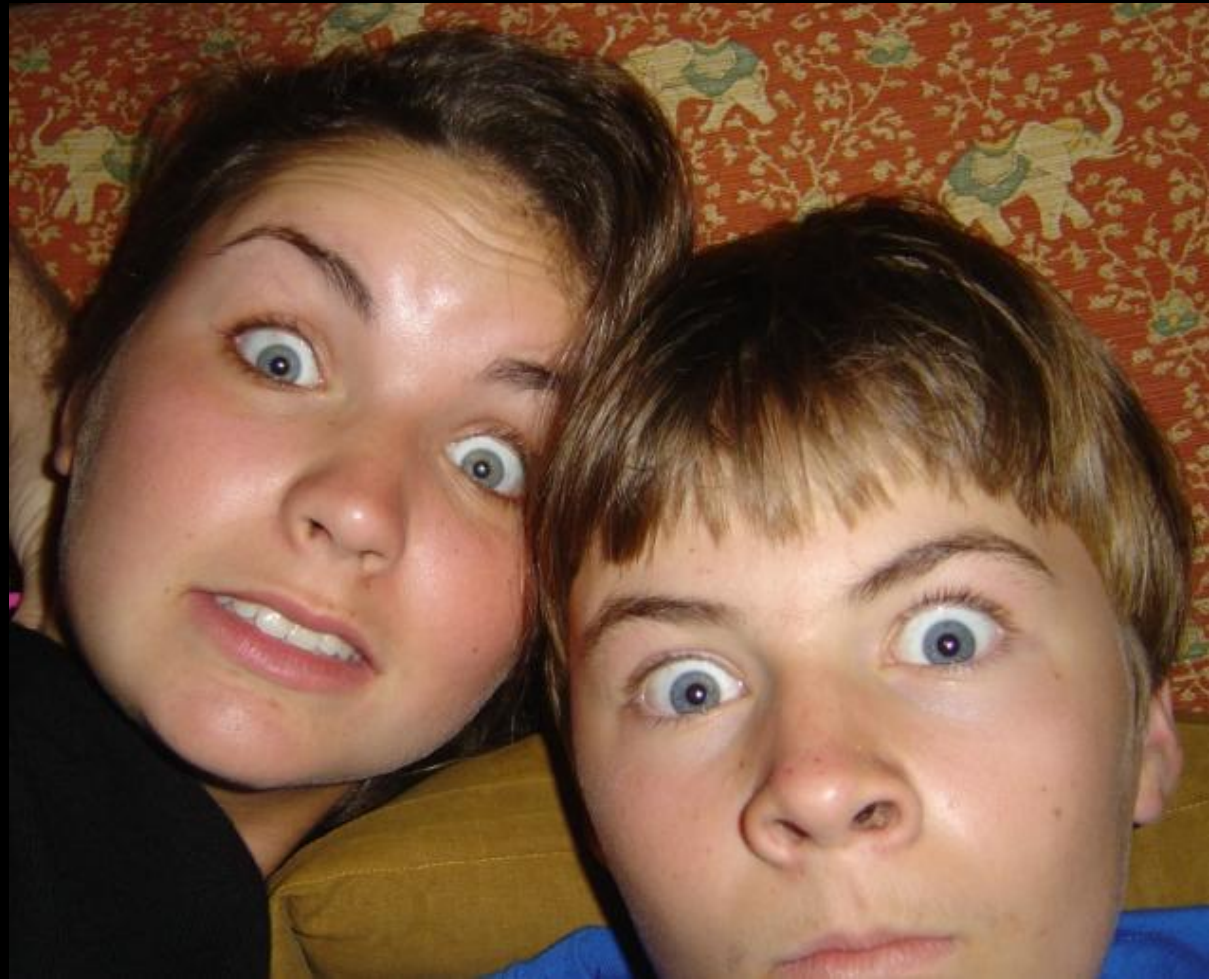


76 businesses
24 nations

Generation Gap?

Scary thought:

**By 2010, Gen Y consumers will
outnumber Baby Boomers**



Or Technology Gap?

**96% of Gen Y consumers
belong to a social network**





**Privacy protection will
soon be a dead issue**

wtf?

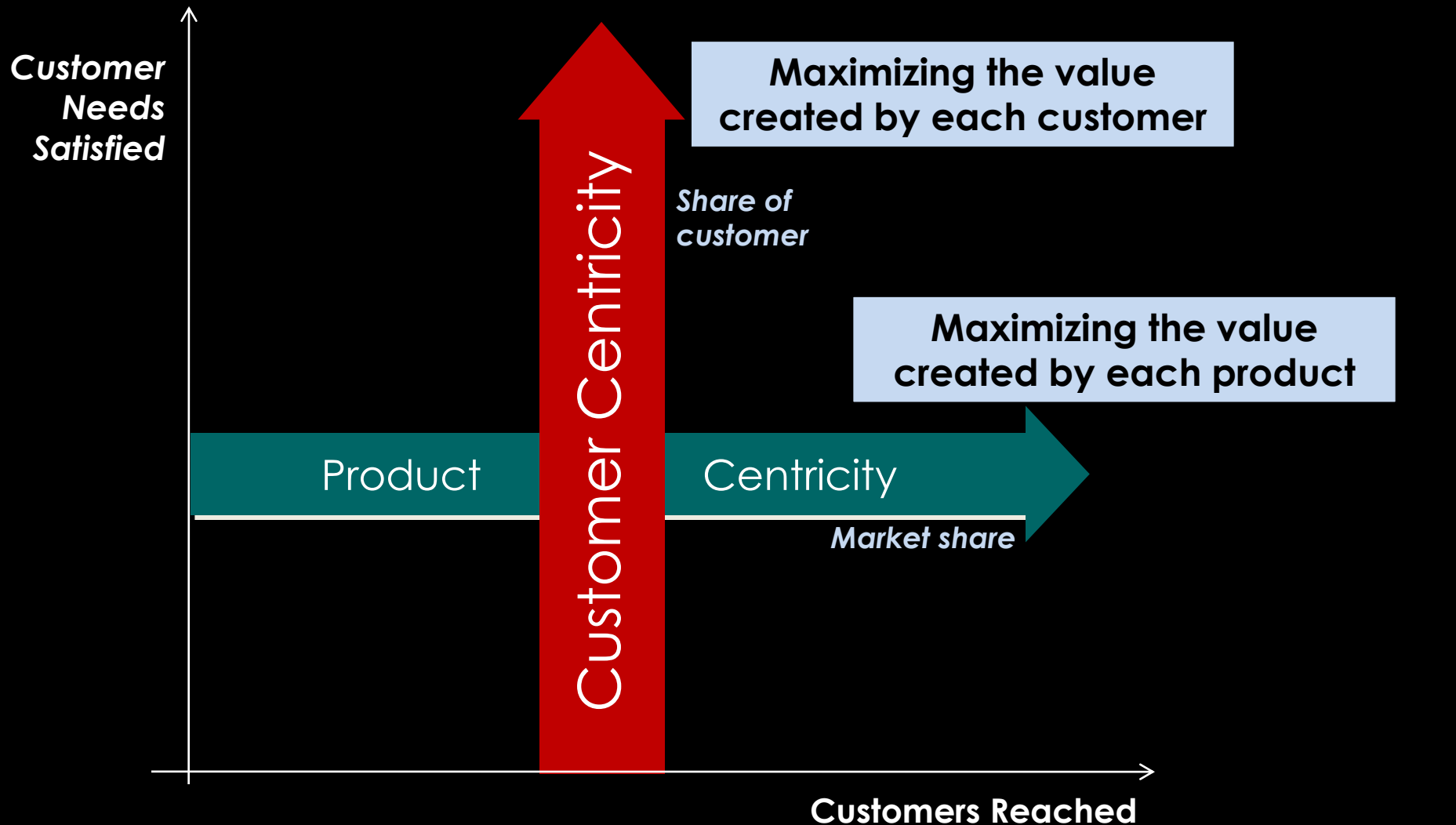


***“The future is already
here. It’s just not evenly
distributed yet.”***

William Gibson

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Competing now in a different dimension



Succeeding against competition



Why does a customer choose you instead of one of your competitors?

“...trust, confidence, strength of customer relationships...”

A customer creates the most value for you
when you create the most value for him

But when does this happen?

Maximizing the value customers
create requires you to earn their trust

Now consider your customer value proposition



Two Requirements For Earning Customer Trust

Intention

to act in the
customer's interest

Competence

to carry out that
intention



Acting in the Customer's Interest **amazon.com.**

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Lack of trust slows transactions
down and imposes frictional costs

When more trust is **required**, business
thrives, as obstacles are reduced

The Need for More Trust Has Boosted Business



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83% of consumers trust the recommendations of their friends

>50% trust online recommendations from complete strangers

Just 14% of consumers trust advertising

Death by word of mouth...



Box office receipts down
40% the day after release!

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Screw up today, and the
“news” will be permanent

“You
can't
un-Google
Yourself”

Linda Kaplan Thaler, CEO, Kaplan Thaler Group

“You can't take something bad off the Internet. That's like trying to take pee out of a swimming pool.”



Grant Robertson, blog post, May 1, 2007



Social networks evolve, by
“preferential attachment”

Preferential attachment
can create a
“cascading” effect

In 2007 the Wall Street Journal Examined 25,000 user posts on six "sharing & collaboration" websites



Cascading is
Unpredictable

Peppers & Rogers Group

In 2005

Netscape has a million collaborating members

But 13% of Netscape's "most popular" postings were done by a single user

ed 25,000 user posts on six "sharing & collaboration" websites

Cascading is Unpredictable

Peppers & Rogers Group

In 2005

Netscape has a million collaborating members

But 13% of Netscape's
"most popular" postings were
by a single user

900,000 registered users on Digg, but
one third of all home-page
postings come from
just 30 users

on six "sharing & collaboration" websites

Cascading is
Unpredictable

Peppers & Rogers Group

In 2007 the Wall Street Journal

900,000 registered users on Digg, but one third of all home-page postings came from just 3

Reddit's most widely read user, Adam Fuhrer, has millions of page views, including MS Vista reviews

operation websites

Cascading is Unpredictable

Peppers & Rogers Group

In 2007 the Wall Street Journal Examined 25,000 u


Cascading is
Unpredictable

Reddit's most
widely read user,
Adam Fuhrer, has
millions of page
views, in
Vi

Adam
Fuhrer is 12
years old!

ersGroup

In 2007 the Wall Street Journal Examined 25,000 user posts on six "shari"



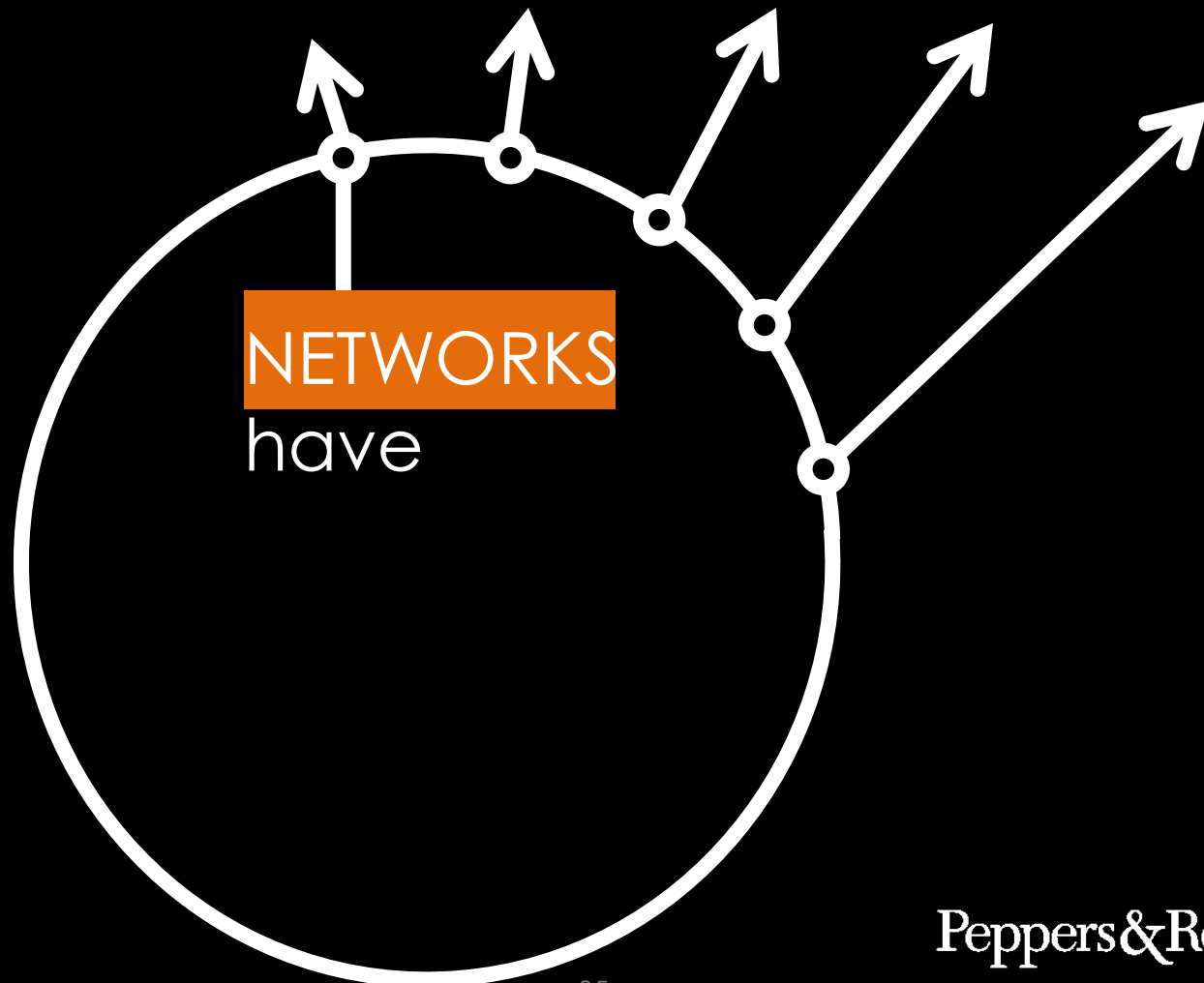
Cascading is
Unpredictable

Adam
Fuhrer is 12
years old!

ersGroup

Path dependent **local randomness**

Collectively predictable **emergent behavior**



Peppers & Rogers Group

...and sometimes networks get it completely wrong

```
graph TD; A[...and sometimes networks get it completely wrong] --> B[In 2005, a blogger wrote about bad service with Dell  
This "Dell Hell" story cascaded online, until BusinessWeek and The New York Times picked it up]; B --> C[Dell's reputation suffered terribly, and its financial results declined, as well]; C --> D[One year later, a UK consulting firm analyzed the incident and concluded it was not Dell's fault at all  
Most of the controversy was generated by misinformation that cascaded through the online network of bloggers];
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In 2005, a blogger wrote about bad service with Dell
This "Dell Hell" story cascaded online, until *BusinessWeek* and *The New York Times* picked it up

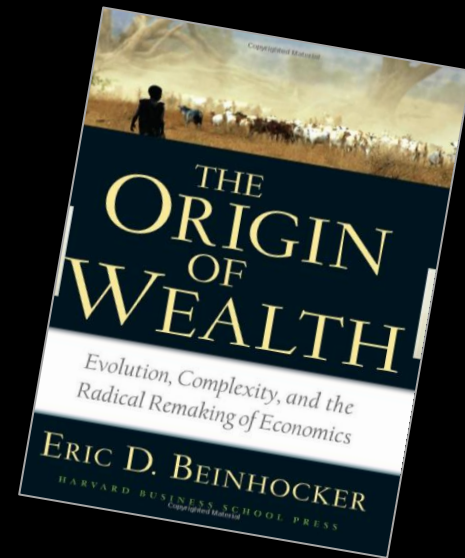
Dell's reputation suffered terribly, and its financial results declined, as well

One year later, a UK consulting firm analyzed the incident and concluded it was not Dell's fault at all

Most of the controversy was generated by misinformation that cascaded through the online network of bloggers

Economic systems also
behave like networks

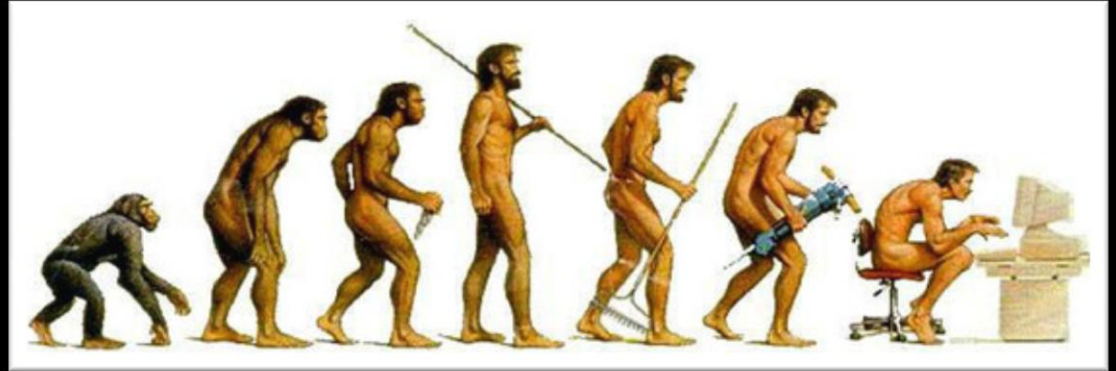
Rather than classical economics,
the right model is “evolutionary”



The Origin of Wealth,
by Eric Beinhocker

Preferential attachment's cascading effect:
Why the rich get richer at a faster rate

Business innovation takes an evolutionary path



Organizations compete to survive in an “evolutionary” economic system

Over time, as in life, business models evolve into more complex and highly ordered “species”

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Because innovation proceeds by trial and error



...success
comes to
those who
“fail wisely”

Apple Macintosh succeeded

→ But remember the Lisa?

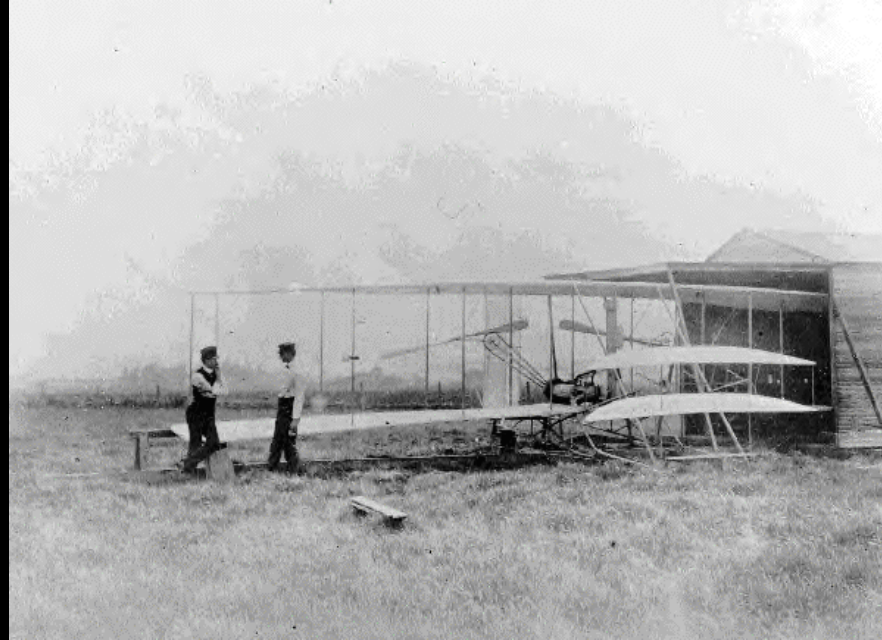
iPod succeeded magnificently

→ But who remembers Newton?

iPhone is a big success

→ But an earlier phone failed

Failing Wisely

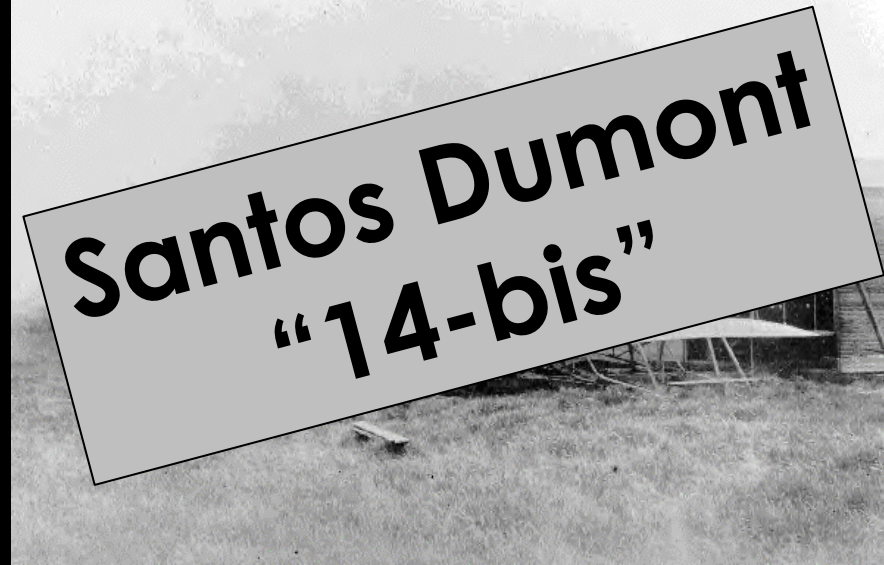


The Wright brothers tested 200 wing designs and crashed seven times before their first successful flight

James Dyson built 5,127 vacuum cleaner prototypes

Why is WD-40 called “WD-40”?

Failing Wisely



Because the first 39 “water displacement” formulas designed by the Rocket Chemical Company in 1953 failed

Why is WD-40 called “WD-40”?

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Evolutionary progress operates like a network

Path dependent **local randomness**

Collectively predictable **emergent behavior**

World's largest camera company?



NOKIA
Connecting People

World's largest music retailer?



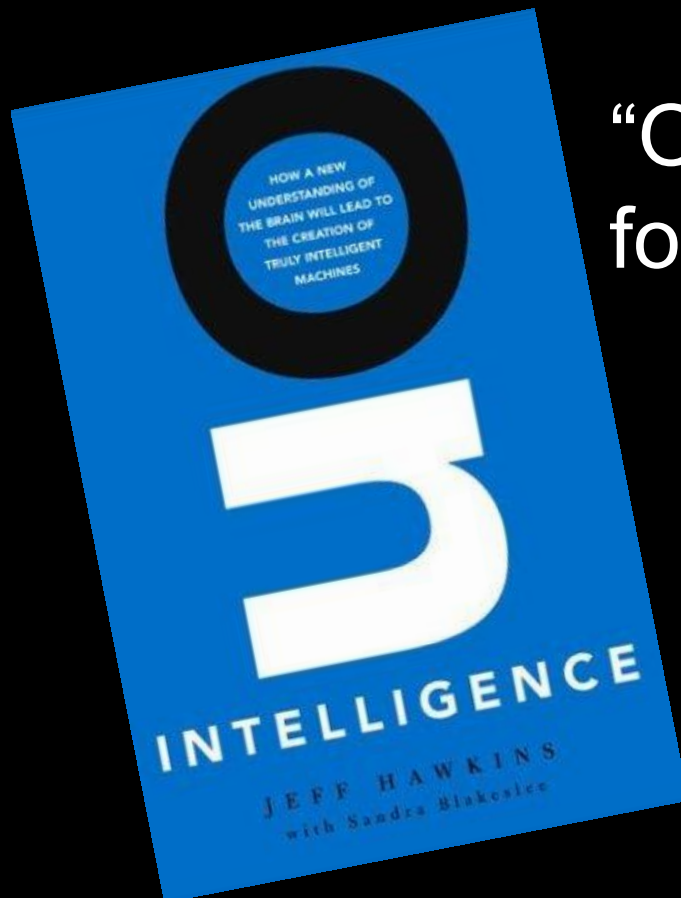
Apple®



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The human brain is a “prediction engine”

Complex tasks are managed easily, until something violates our expectations...

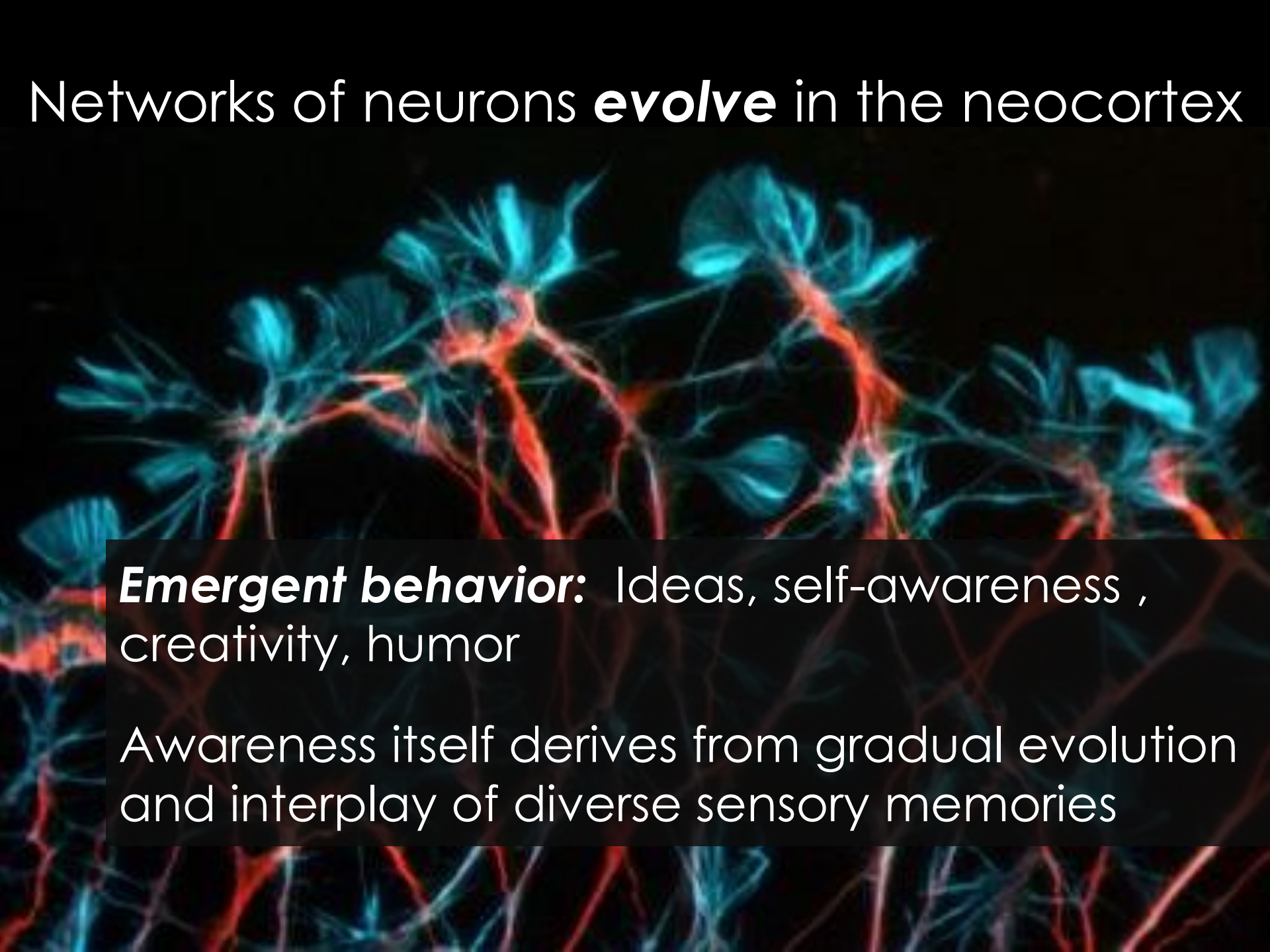


“Our brain is structured for constant forecasting.”



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Networks of neurons **evolve** in the neocortex

A 3D visualization of a neural network, showing a complex web of branching structures. The structures are colored in vibrant red and blue, set against a dark background. The red structures form a central, more dense network, while the blue structures branch out more extensively, creating a star-like pattern. The overall appearance is that of a highly interconnected, evolving system.

Emergent behavior: Ideas, self-awareness ,
creativity, humor

Awareness itself derives from gradual evolution
and interplay of diverse sensory memories

What is creativity, really?



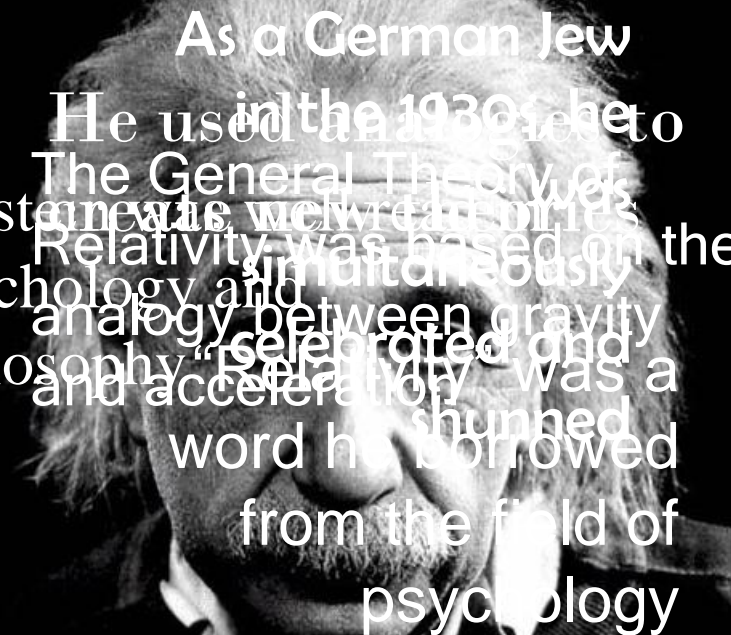
If we could explain creativity, it wouldn't be "creative," would it?

But most creative ideas **evolve** out of different perspectives, combined

Different perspectives:

Statistics show **androgynous people** are more creative

The most creative people have diverse interests



As a German Jew
in the 1930s, he
He used analogies to
The General Theory of
Einstein was well read in
Relativity was based on the
psychology and
simultaneously
analogy between gravity
philosophy. "Relativity" was a
and acceleration word he borrowed
from the field of
psychology

One sign of a creative mind: Humor

Humor requires combined perspectives, empathy, synthesis, and context

Creative managers use humor twice as often

Humor is correlated with emotional intelligence

There is no question that a playfully light attitude is characteristic of creative individuals

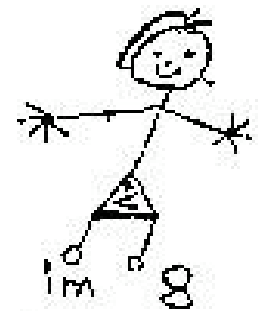
- Mihaly Csikszentmihalyi

- Mihaly Csikszentmihalyi

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Test your sense of humor...

Complete this
note, handed
to a Qantas
flight attendant



dear Captain
My name is Nicola im 8
years. old, this is my first
flight but im not scared. I
like to watch the clouds go
by. My mum says the crew is
nice. I think your plane is
good. thanks for a nice flight

Emergent Behavior

Why do groups make better decisions?

Diverse Perspectives



Jan 28, 1986 – 11:39am

Four key space shuttle contractors

Rockwell
built the
Challenger
and its
engines

Lockheed
managed
ground
support

Martin
Marietta
built the
external fuel
tank

Morton
Thiokol built
the solid fuel
boosters

“No clues” on the day of the event

But by 11:50 am, Thiokol's stock was
down the most



Jan 28, 1986 – 11:39am

Four key space shuttle contractors

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Lockheed
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Martin
Marietta
built the
external fuel
tank

Morton
Thiokol built
the solid fuel
boosters

How did the
market *know*?


“Decision markets” now used widely

Best Buy  TagTrade Prediction Market

Forecasts sales of products, gift cards, service contracts

Google™

Predicts Gmail subscription volume, ad sales forecasts

rite 
SOLUTIONS

Evaluated and launched a new product, Rite View

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Mobile CIT: A ***ubiquitous social network*** is now evolving!

➤ Mobile CIT will change human reality in three general areas:

1. Transacting and doing
2. Connecting and networking
3. Sensing and understanding

1. Transacting and doing

“A mobile phone is just a credit card with an antenna...”

Richard Fairbank
Founder and CEO, Capital One



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1. Transacting and doing

Commercial transactions can bear the cost



Partnering with Thales, maker of
inflight entertainment systems

Soon to offer 1-to-1 entertainment and
advertising to passengers

1. Transacting and doing

Commerce will drive connectivity further



Free SIM card, just apply
43 free minutes a month

How Blyk uses its customers' social networks





You must be 16 to 24!

1. Transacting and doing

Entertainment, fun, amusement, games

- ✓ Portable multimedia players
- ✓ Mobile gaming
- ✓ Automotive infotainment

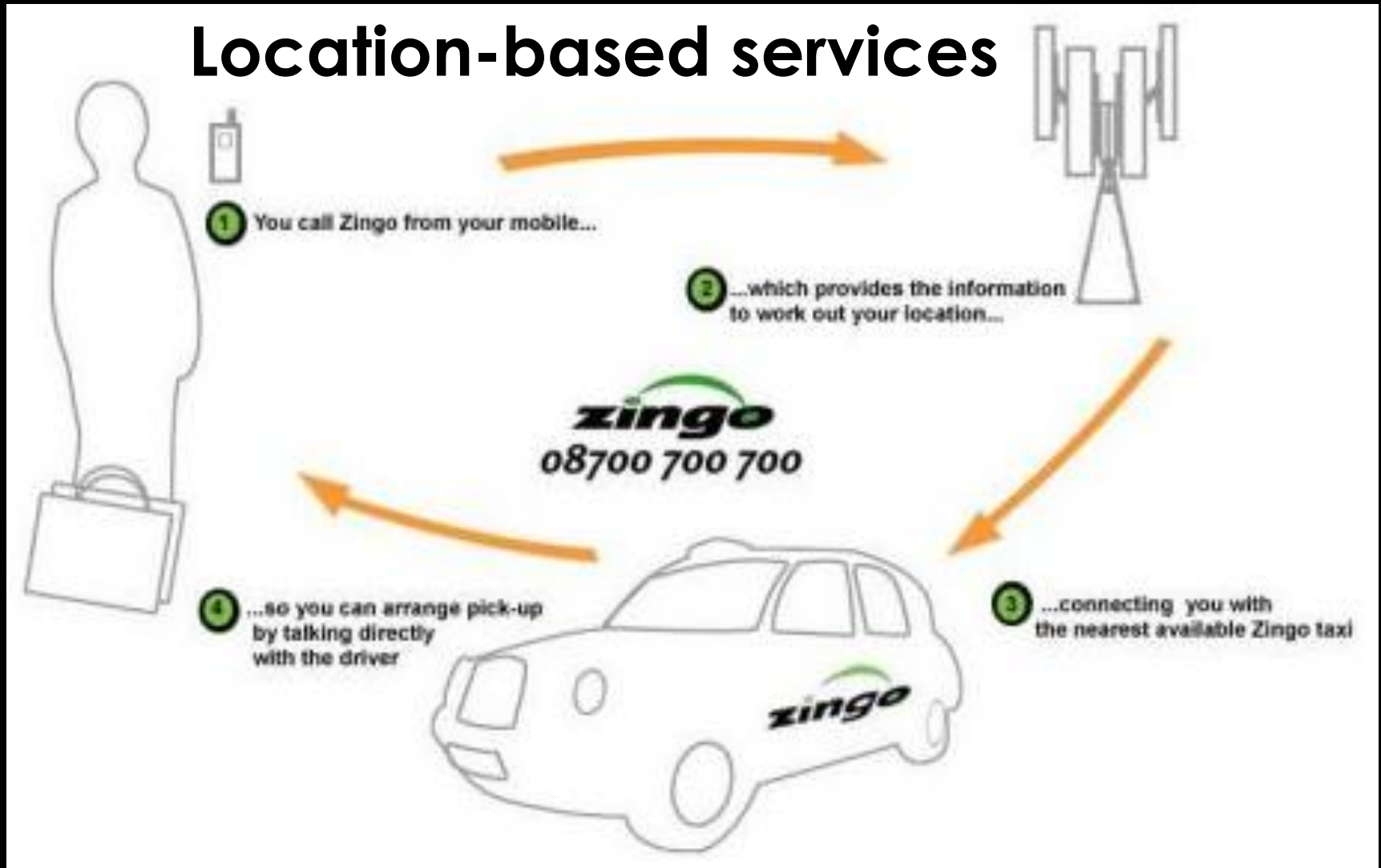
Coming soon with CIT?

-  Voice-verification purchases and payments
-  Real-time reality shows
-  “Concerts” with PMT devices sounding like different instruments or voices
-  Sports events viewed from others’ seats

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2. Connecting and networking

Location-based services



2. Connecting and networking

Location-based networking

- Traffic reports based on actual real-time traffic



3. Connecting and networking

Mobile CIT can connect the real world with the Web, and the result is “Augmented Reality”

8:15 am

Changing his Augmented ID
from party to work profile,
with his contact details and
presentation accessible

Source: TAT Company (www.tat.se)

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2. Connecting and networking

- ✓ When you access Facebook or Twitter, don't you want to know who else is "present"?
- ✓ PMT allows "presence" and "location" to be combined, along with online tags

Coming soon with CIT?

- 🌐 "Drill down" to augmented info on any product, building, location, or physical object you see, anywhere
- 🌐 Show up at the stadium, or the mall, or the concert, and quickly see which friends are present
- 🌐 Always-present friends, doing homework, going on "walks" together, cooking, taking shopping trips...

3. Sensing and understanding

Technology is better and better at enhancing our bodies



Peppers&RogersGroup

3. Sensing and understanding

But sensory enhancements will be first



3. Sensing and understanding

And sensory enhancements will get better

Looks like a Bluetooth earphone
Actually, a directional microphone



Headcam
Always-on streaming video

3. Sensing and understanding

Collective power of sensory inputs

What would “the news” be today without on-the-scene people videoing crimes and disasters?

Now imagine millions of mobile, networked cameras uploading their images, 24/7

How “real” will real-time news actually be?

And soon you’ll be sorting through these images with software that recognizes locations and faces!

3. Sensing and understanding

“Cloud sensing” using collective inputs

Earthquakes can be detected using a few thousand individual laptops

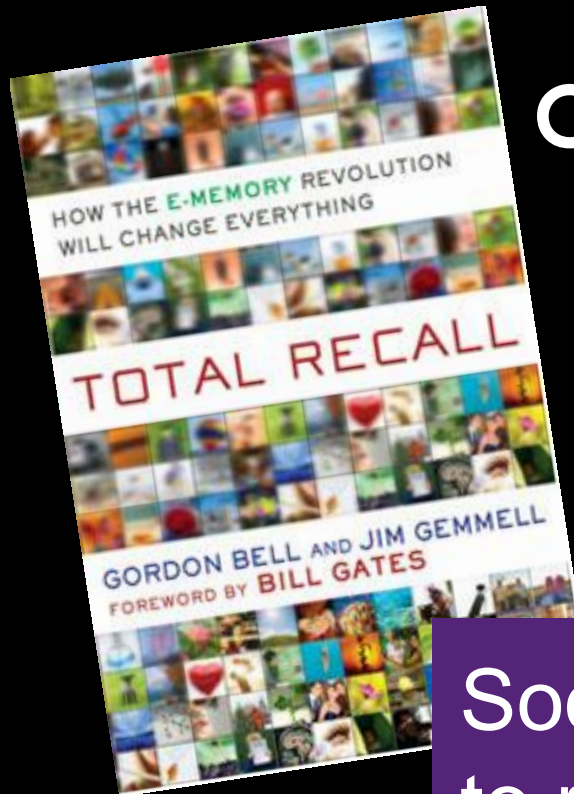


Jesse Lawrence
Asst Prof of Deep Earth Seismology
Stanford

Source: *Economist*, Sept 25, 2008

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3. Sensing and understanding



Collective “total recall”

Total Recall, by Gordon Bell
and Jim Gemmell

Soon you'll use mobile technology
to record everything you ever see,
do, hear, read, or write

3. Sensing and understanding

Network-enhanced *understanding*

- ✓ Sensory inputs drive our brains – our “prediction engines”
- ✓ As a network with *linked* senses, the human race is destined to become collectively smarter and more creative

Coming soon with CIT?

- 🌐 Ad hoc “smart networks” of connected users anticipating events, collectively
- 🌐 Total recall of everything others allow you to have, too!
- 🌐 Voice-analysis lie detectors and emotion sensors
- 🌐 Molecular “sniffers” and pheromone detectors

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Computers will never do everything

CAUTION
THIS MACHINE
HAS NO BRAIN
USE YOUR OWN

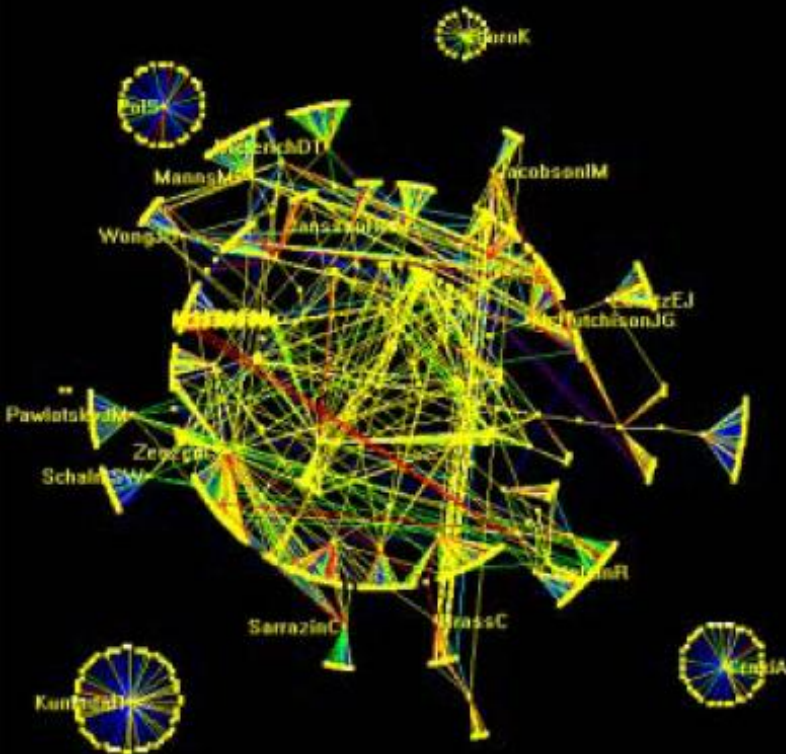


DA

Technology undermines hierarchies

Today the lowliest employee can leap tall hierarchies in a single click

Employees network together, on ad hoc basis

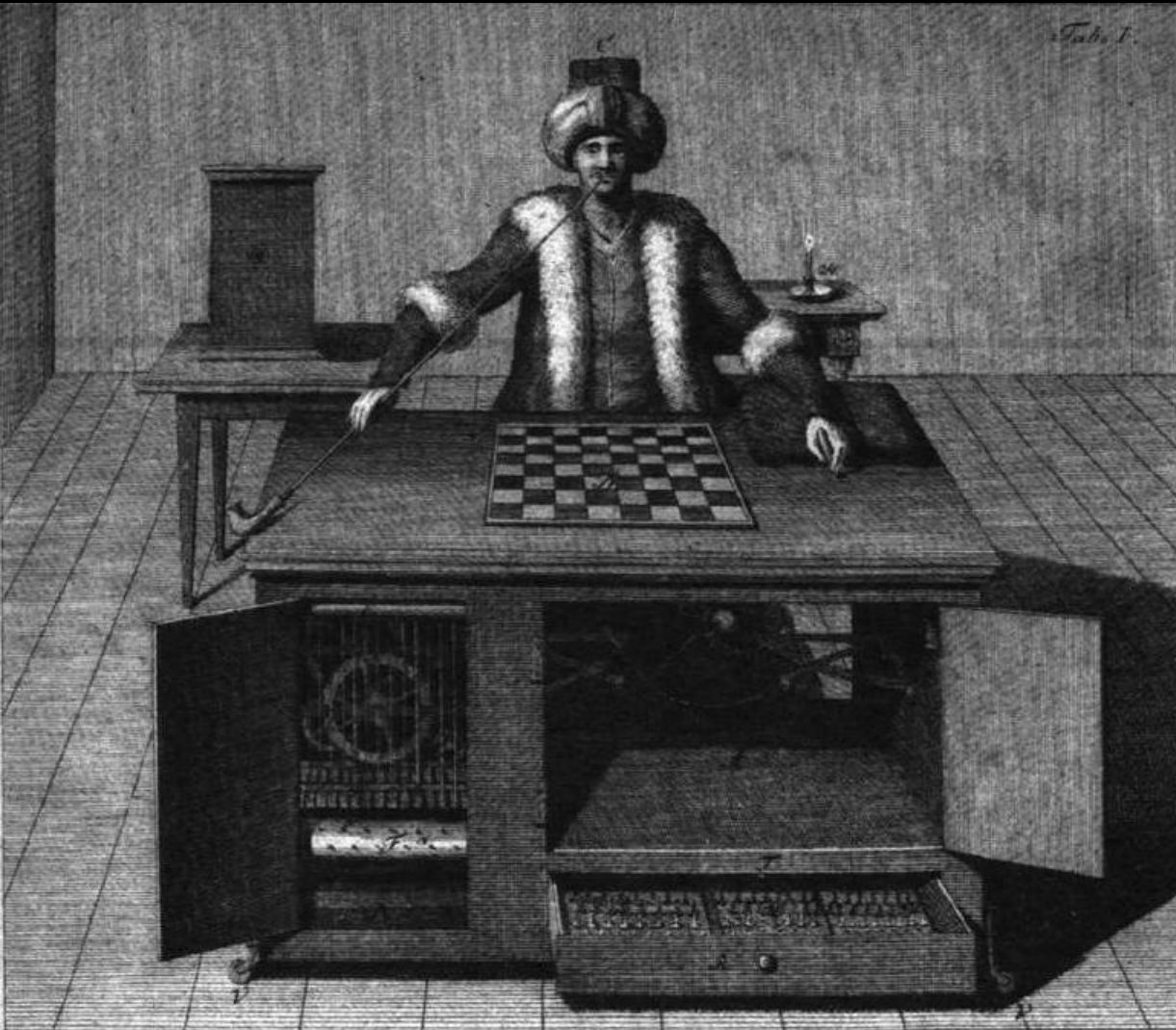


Production and transactional jobs are now automated

“Non-routine” jobs growing faster, and pay more

Peppers&RogersGroup

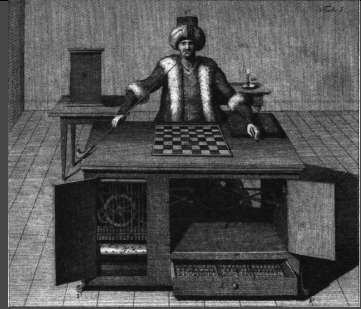
The real secret to a great brand...



The
“Mechanical Turk”

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There has to be a person in there



What you want:
Self-organization

Your employees need to be
Engaged in their work and
Enabled to accomplish their mission

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Strategies for succeeding in a random world

Focus on your company's culture,
and encourage ***self-organization***

Develop a philosophy of business
based on ***customer trust***

Strategies for succeeding in a mobile CIT world

Recognize that **inputs** are more important than **outputs**

Measure performance not just by outcomes, but by effort, creativity, and preparation

Celebrate “wise failures,” and promote **experimentation**

Strategies for succeeding in a mobile CIT world



Concentrate on predictable
emergent behaviors

When the direction of innovation is predictable,
plan for the ***capability***, not the ***technology***

Strategies for succeeding in a mobile CIT world

Radical idea: Digitize and streamline your support and customer service functions

Predictable:

Technology will continue to digitize and streamline product distribution networks

Strategies for succeeding in a mobile CIT world

Google Search

Share Browser WebEx

In-flight Wi-Fi Access

Google Sidewiki

Entries about the entire page:

Don Peppers - Nov 26, 2009
Business author, consultant, and public speaker,
Peppers & Rogers Group

I love the WIFI on Delta flights

Nearly all the Delta planes I've been on in the past two months have had Wifi with GoGo, and I have dramatically increased my productivity.

[Edit](#) [Delete](#) [Share](#)

DELTA

Home | Country/Language | Profile | Need Help? | Contact Us | Site Map

Log In

Planning & Reservations | Traveling & Check-in | SkyMiles®

In-flight Services

- BusinessElite®
- First Class
- Economy Class
- In-flight Products**
 - In-flight Wi-Fi Access
 - In-flight Power
 - Sky Magazine®
 - Onboard Shopping

Free In-flight Wi-Fi Access (November 24-30, 2009)

eBay Now you can fly high and stay in touch, and for a limited time you can do it for free courtesy of eBay. Enjoy free Wi-Fi Internet access on one of our 1,000 daily flights using your laptop or PDA from November 24-30.

In-flight Internet access will be available across our domestic fleet of more than **300 aircraft** in 2009 through our relationship with Gogo® In-flight Internet Access. To see which aircraft are currently supported, [learn more](#).

Next Steps

- [Register Now](#)
- [View purchase options](#)
- [Wi-Fi FAQ](#)
- [View Approved Devices](#)

Google sidewiki

How do I use Wi-Fi in-flight?

Registering for Gogo is fast, easy, and free. Once you [create an account](#), you can easily purchase a session on your next Gogo-equipped flight.

Look for the "Wi-Fi Onboard" symbol near the aircraft door when boarding to see if your flight offers Wi-Fi service. Once the plane reaches 10,000 feet and the captain gives the OK to turn on portable electronic devices, just sign up and log in.

Requirements & Supported Devices

Wi-Fi works with smartphones and other wireless handheld devices offered by all major U.S. providers. Platforms supported include: Blackberry®, Windows® Mobile, Apple®, and Nokia® (Symbian S60). Voice service is not supported.

The minimum requirements for access are Wi-Fi capability (802.11 a/b/g) and a laptop with supported web browser, including Microsoft Internet Explorer® 6&7 (Windows® XP or Vista®), Mozilla® Firefox®, Safari® on Mac OS® X.

Wi-Fi is available across the continental United States while the plane is above 10,000 feet at speeds similar to wireless mobile broadband services on the ground.

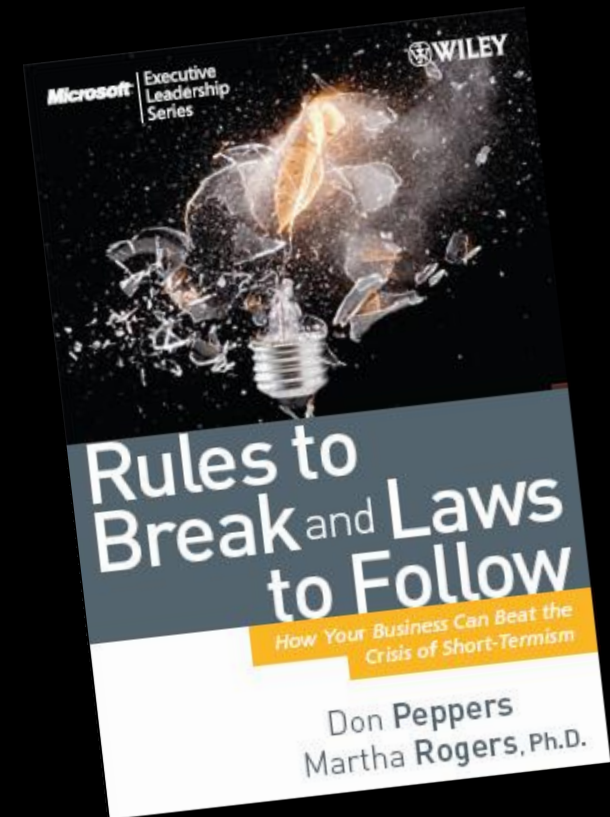
 @DonPeppers

Peppers & Rogers Group

Management consultants in
customer strategy issues

Magazines, newsletters,
research white papers

Offices and clients around the world



To subscribe to the "1to1 Weekly" email newsletter: dpeppers@1to1.com

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